

Claims

1. (currently amended) In a design tool, a method ~~of presenting a schedule for a design including one or more loops, the method~~ comprising:

displaying in a Gantt chart a top-level schedule for a design that includes one or more loops; and

displaying a first loop schedule for a first loop of the one or more loops, wherein control step timing within the first loop schedule is presented relative to the first loop schedule.

2. (original) The method of claim 1 wherein the displaying the first loop schedule hierarchically nests the first loop schedule within the top-level schedule.

3. (original) The method of claim 1 wherein each of the top-level schedule and the first loop schedule includes an independently numbered set of control steps.

4. (original) The method of claim 3 wherein the first loop schedule begins with a control step 0 for non-real operations of the first loop schedule that execute in a clock cycle for a control step of the top-level loop schedule.

5. (currently amended) The method of claim 1 wherein before the displaying the first loop schedule, the top-level schedule includes an icon summarizing the first loop schedule, and wherein control step timing within the top-level schedule is presented as independent of latency of the first loop schedule.

6. (original) The method of claim 1 further comprising:

hiding the first loop schedule responsive to a command from a designer.

7. (original) The method of claim 1 further comprising:

displaying a textual list of scheduled operations; and

displaying an icon adjacent a first loop label in the textual list, the icon indicating whether the first loop schedule is expanded or collapsed.

8. (currently amended) The method of claim 1 further comprising:
displaying a second loop schedule for a second loop of the one or more loops, wherein control step timing within the second loop schedule is presented relative to the second loop schedule.
9. (original) The method of claim 1 wherein the Gantt chart includes at least one pseudo-operation icon.
10. (currently amended) The method of claim 1 wherein the first loop includes plural alternative branches of execution having different lengths, and wherein the control step timing within the first loop schedule is independent of the different lengths of the plural branches.
11. (original) The method of claim 1 wherein the design tool is a behavioral synthesis tool.
12. (original) A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 1.
13. (previously presented) In a design tool, a method of presenting information for a design, the method comprising:
presenting first information for a block of a design, the block including a sub-block that includes a number of timing steps; and
presenting second information for the sub-block of the design, wherein timing within the block is presented as independent of the number of timing steps of the sub-block.
14. (original) The method of claim 13 wherein the block is for a top-level loop, wherein the top-level loop includes a nested loop, and wherein the sub-block is for the nested loop.
15. (original) The method of claim 13 wherein the sub-block is for one of plural alternative branches of execution within the block.

16. (original) The method of claim 13 wherein the first information is a block schedule and the second information is a sub-block schedule.

17. (original) The method of claim 13 wherein the first information is a block schedule and the second information is an icon representing a sub-block schedule.

18. (previously presented) The method of claim 17 wherein the icon appears in a clock overhead space of a timing step of the block schedule.

19. (original) The method of claim 13 wherein timing within the sub-block is presented relative to the sub-block.

20. (previously presented) The method of claim 13 wherein the timing steps of the sub-block are control steps, and wherein each of the block and the sub-block includes an independently numbered set of control steps.

21. (original) The method of claim 13 wherein the presenting the second information nests the second information within the first information.

22. (previously presented) The method of claim 17 further comprising presenting the sub-block schedule in a separate window.

23. (previously presented) The method of claim 13 further comprising:
presenting a list of operation labels including one or more sub-block operation labels indented relative to one or more block operation labels in the list.

24. (previously presented) The method of claim 13 further comprising:
presenting third information for a second sub-block of the design, wherein the second sub-block includes a second number of timing steps, and wherein timing within the block is presented as independent of second number of timing steps.

25. (original) The method of claim 13 wherein the design tool is a behavioral synthesis tool.

26. (original) A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 13.

27. (currently amended) In a design tool, a method of presenting a hierarchical Gantt chart, the method comprising:

presenting plural nested schedules for a design, each of the plural nested schedules including:

- a line of control step labels; and
- one or more lines of schedule information including at least one operation icon.

28. (currently amended) The ~~hierarchical Gantt chart~~ method of claim 27 wherein the plural nested schedules include a top-level schedule, and wherein presentation of each of the plural nested schedules other than the top-level schedule is in a clock overhead space of a control step of the schedule enclosing the nested schedule.

29. (currently amended) The ~~hierarchical Gantt chart~~ method of claim 27 wherein presentation of each of the plural nested schedules expands or collapses responsive to designer input.

30. (currently amended) The ~~hierarchical Gantt chart~~ method of claim 27 wherein the design tool is a behavioral synthesis tool.

31. (previously presented) In an electronic circuit or system design tool, a method of presenting a list of operations for an electronic circuit or system design, the method comprising:
presenting a top-level list of one or more operations for the design, wherein the top-level list includes a first loop label for a first nested loop; and

presenting a sub-list of one or more operations for the first nested loop, wherein the sub-list is indented relative to the top-level list.

32. (original) The method of claim 31 further comprising:
responsive to a collapse command, hiding the sub-list.

33. (original) The method of claim 31 wherein the design tool is a behavioral synthesis tool.

34. (original) A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 31.

35. (previously presented) In an electronic circuit or system design tool, a method of presenting a list of operations for an electronic circuit or system design, the method comprising:
presenting a top-level list of one or more operations for the design, wherein the top-level list includes a first loop label for a first nested loop; and
presenting an icon adjacent the first loop label, the icon indicating whether a sub-list of one or more operations for the first nested loop is expanded or collapsed.

36. – 41. (canceled)

42. (previously presented) The method of claim 1 wherein the design tool is an electronic circuit or system design tool, and wherein the design is an electronic circuit or system design.

43. (previously presented) The method of claim 13 wherein the design tool is an electronic circuit or system design tool, and wherein the design is an electronic circuit or system design.

44. (previously presented) The method of claim 13 wherein the timing within the block is presented as independent in that the second information is presented within a single timing step of the block regardless of the number of timing steps of the sub-block.

45. (previously presented) The method of claim 44 wherein the timing steps of the sub-block are presented within the single timing step of the block.

46. (previously presented) The method of claim 17 wherein the icon is presented in a scheduling frame that shows allowable locations of the sub-block schedule within the block schedule.

47. (currently amended) The ~~hierarchical Gantt chart~~ method of claim 27 wherein the design tool is an electronic circuit or system design tool, and wherein the design is an electronic circuit or system design.

48. (currently amended) The ~~hierarchical Gantt chart~~ method of claim 27 wherein the at least one operation icon each represents a scheduled operation.

49. (new) The method of claim 1 further comprising:
displaying a second loop schedule for a second loop of the one or more loops, wherein the second loop is nested within the first loop, and wherein control step timing within the second loop schedule is presented relative to the second loop schedule.

50. (new) The method of claim 13 wherein the sub-block includes a sub-sub-block, the method further comprising:

presenting third information for the sub-sub-block, wherein the sub-sub-block includes a second number of timing steps, and wherein timing within the sub-block is presented as independent of second number of timing steps.